

What is claimed is:

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5 1. A head slider for use in a disk drive unit wherein flat air bearing portions are formed in parallel on both sides of a side of said head slider which flies above a disk medium at an air outflow end thereof in such a manner that said flat air bearing portions are raised higher by a step than a slider main body, and wherein a head portion comprising head elements and a protection film for protecting said head elements is provided adjacent to an air outflow end of one of said air bearings, whereas a dummy head portion comprising only a protection film is provided adjacent to an air outflow end of the other air bearing portion, top surfaces of said protection films being formed lower by a step than top surfaces of said air bearing portions, said head slider being characterized in that:

10 said top surfaces of said head portion and said dummy head portion on air outflow sides thereof are formed lower by a degree which is greater than a difference in level between said air bearing portions and said protection films.

20 2. A head slider as set forth in Claim 1, wherein the distance in a longitudinal direction of said head slider of an area where the top surface of said protection film on said head portion is formed lower is made equal to the distance in the longitudinal direction of said head slider of an area where the top surface of said protection film on said dummy head portion is formed lower.

30 3. A head slider as set forth in Claim 2, wherein the distance in the longitudinal direction of said head slider of an area where the top surface of said protection film on said dummy head portion is formed lower is made longer than the distance in a longitudinal direction of said head slider of an area where the top surface of said protection film on said head portion is formed lower.

4. A head slider as set forth in Claim 2, wherein the top surface of said protection film on said dummy head portion is formed such that a certain area of the top surface of said protection film is maintained as high as the height of the top surface of said protection film which is adjacent to said air bearing portion in the longitudinal direction of said head slider, whereas the remaining area of the top surface of said protection film is lowered than said certain area over an area to the vicinity of said air bearing portion.

5. A head slider as set forth in Claim 1, wherein the top surfaces of said head portion and said dummy head portion on air outflow sides thereof are lowered by partially deleting said protection films.

6. A head slider as set forth in Claim 1, wherein locations of the top surfaces of said head portion and said dummy head portion which are formed lower are level with the flying height of a side of a main body of said head slider which flies above said disk medium.

7. A head slider as set forth in Claim 1, wherein the locations of the top surfaces of said head portion and said dummy head portion which are formed lower are positioned higher than the flying height of the side of said main body of said head slider which flies above said disk medium.

8. A head slider as set forth in Claim 1, wherein a plurality of pads are provided on the side of said main body of said head slider which flies above said disk medium for avoiding the sticking of said head slider to said disk medium when said disk medium is at a stop.

9. A head slider as set forth in Claim 4, wherein the top surfaces of said head portion and said dummy head portion on air outflow sides thereof are lowered by deleting said protection films partially.

10. A head slider as set forth in Claim 5, wherein locations of the top surfaces of said head portion and said dummy head portion which are formed lower are level

with the flying height of a side of a main body of said head slider which flies above said disk medium.

5 11. A head slider as set forth in Claim 7, wherein the locations of the top surfaces of said head portion and said dummy head portion which are formed lower are positioned higher than the flying height of the side of said main body of said head slider which flies above said disk medium.

10 12. A head slider as set forth in Claim 8, wherein a plurality of pads are provided on the side of said main body of said head slider which flies above said disk medium for avoiding the sticking of said head slider to said disk medium when said disk medium is at a stop.

15 13. A magnetic disk drive unit comprising in a box body a spindle motor for rotating at least one disk medium and a head slider comprising in turn a head for reading data from and writing data to said disk medium, said head slider being mounted via head suspension on a distal end portion of a carriage which is driven by a voice coil motor and able to perform seeking relative to recording tracks formed on said disk medium; wherein

20 flat air bearing portions are formed in parallel on both sides of a side of said head slider which flies above said disk medium at an air outflow end thereof in such a manner that said flat air bearing portions are raised higher by a step than a slider main body, wherein a head portion comprising head elements and a protection film for protecting said head elements is provided adjacent to an air outflow end of one of said air bearings, whereas a dummy head portion comprising only a protection film is provided adjacent to an air outflow end of the other air bearing portion, top

25 surfaces of said protection films being formed lower by a step than top surfaces of said air bearing portions, and

30 wherein said top surfaces of said head portion and said dummy head portion on air outflow sides thereof are formed lower by a degree which is greater than a

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difference in level between said air bearing portions and said protection films.

14. A head slider as set forth in Claim 13, wherein the distance in a longitudinal direction of said head slider of an area where the top surface of said protection film on said head portion is formed lower is made equal to the distance in the longitudinal direction of said head slider of an area where the top surface of said protection film on said dummy head portion is formed lower.

15. A head slider as set forth in Claim 14, wherein the distance in the longitudinal direction of said head slider of an area where the top surface of said protection film on said dummy head portion is formed lower is made longer than the distance in a longitudinal direction of said head slider of an area where the top surface of said protection film on said head portion is formed lower.

16. A head slider as set forth in Claim 14, wherein the top surface of said protection film on said dummy head portion is formed such that a certain area of the top surface of said protection film is maintained as high as the height of the top surface of said protection film which is adjacent to said air bearing portion in the longitudinal direction of said head slider, whereas the remaining area of the top surface of said protection film is lowered than said certain area over an area to the vicinity of said air bearing portion.

17. A head slider as set forth in Claim 13, wherein the top surfaces of said head portion and said dummy head portion on air outflow sides thereof are lowered by deleting said protection films partially.

18. A head slider as set forth in Claim 13, wherein locations of the top surfaces of said head portion and said dummy head portion which are formed lower are level with the flying height of a side of a main body of said head slider which flies above said disk medium.

19. A head slider as set forth in Claim 13, wherein  
the locations of the top surfaces of said head portion  
and said dummy head portion which are formed lower are  
positioned higher than the flying height of the side of  
5 said main body of said head slider which flies above said  
disk medium.

20. A head slider as set forth in Claim 13, wherein  
a plurality of pads are provided on the side of said main  
body of said head slider which flies above said disk  
10 medium for avoiding the sticking of said head slider to  
said disk medium when said disk medium is at a stop.

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